



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,927	11/16/2000	Takashi Yamamoto	001527	3205

23850 7590 06/25/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
----------	--------------

1756

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/712,927

Applicant(s)

YAMAMOTO ET AL.

Examiner

Christopher D RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 106, 8-14, and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

Applicant's helpful amendments have overcome the previous grounds of rejection under § 112, first paragraph.

Claim Rejections - 35 USC §§ 102 & 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-6, 8-14, and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ugai *et al.* in US Patent 5,698,354.

As applicant is aware, this rejection was applied in previous Office actions and has been fully discussed by both applicant and the Examiner. The recent amendments remove the requirement for a development device and replace that limitation with a development roller. Such a component is present in Ugai in at least Figure 9 as element 142 (col. 30, l. 60 – col. 31, l. 4). This component is present in a non-magnetic one-component contact development method (col. 30, l. 46-47). The claimed method steps of forming individual monochromatic color images and then superposing those images to form the multicolored toner image is present in the reference noting Figure 1 and Examples 81-97 (note reliance on Examples 1-15 where the image forming apparatus of Figure 1 is used).

In the traversal applicant relies on the previously presented remarks and additional points that will be discussed below.

Art Unit: 1756

Applicant is understood to traverse this rejection because Ugai's preferred amount of external additive only partially overlaps with the amounts used in the instant invention as discussed in the prior traversals. Applicant notes that Ugai uses the external additive to improve toner fluidity, which is made hydrophobic. Ugai's toner also has specific shape characteristics. Applicant also discusses concerns for mechanical and electrical stresses in contact development as pertinent to the instant invention (response p. 6). Ugai uses its fluidity additive for different purposes and does not show concern for the stresses present in contact development.

The Examiner has again carefully reviewed applicant's remarks in view of the reference. As noted in the last Office action Ugai identically discloses a contact type development process using one-component non-magnetic developer in Examples 81-97 (col. 57, l. 17 - col. 58, l. 24). Although non-contact type development is also disclosed, the reference exemplifies contact type development in Examples 81-97. The toner used in these examples is, for example, Cyan Toners 21-35 (col. 57, l. 26-27) and the corresponding Magenta Toners. For examples 96 and 97, Yellow Toners 21 and 25 are also used (col. 58, l. 15-24, Table 2). The total content of the external additives in these examples is 2.0 or 2.2 weight % per unit of toner. These amounts fall squarely within the scope of the instant claims (1.5 to 10.0 parts per 100 parts of toner). Note Cyan Toner 25 has a mixture of external additives with one additive having a size of 70 nm and the other additive smaller (Table 2; pending claims 2 and 10). Cyan Toner 29 is also relevant for having two additives with sizes within the scope of the dependent claims.

As is apparent from the above discussion, Ugai does disclose a contact development process where the toner has external additive in amounts and with size characteristics within the scope of the instant claims. The reference does not discuss the specific mechanical and electrical stresses in its process, but because the reference has the same process as claimed

Art Unit: 1756

the reference's inventors would have been expected to consider all relevant characteristics for that process. The Examiner also notes that the general concept of mechanical and electrical stress is not claimed, except as related to the claimed aggregation and charging characteristics. Those characteristics are fully addressed by this rejection as noted in the prior Office actions because the claimed process appears to be inherently the same as that of Ugai.

Specifically, the reference exemplifies the use of hydrophobic silica external additives, which are also used in the instant specification. The specification indicates that the characteristics of the external additives are critical to obtain the claimed aggregation and charging characteristics (spec. p. 22, l. 18 *et seq.* & spec. p. 30, l. 34 - p. 31, l. 33). The reference silicas are used in material amounts and have sizes similar to those used in the instant specification (compare Cyan Toner 21 and 24 with Preparation of Toner C on spec. p. 25 & the disclosure on spec. p. 22, l. 32-36). Also note Cyan Toner 25, which has a combination of external additives with sizes of 15 nm and 70 nm (relevant to claims 2 and 10). Because the silica particles are similar in size to those exemplified in the instant invention it appears that the reference silicas would inherently have the claimed BET surface area. Ugai also teaches that the toner should have a constant charge amount (col. 14, l. 19-20), such as through the use of a charge control agent. This suggests minimization of change in charge amount through use as specified in claim 9's change ratio. A minimization of charging amount would give a ratio of 1 in claim 9.

Based on the substantial similarity in toner composition and external additives and the disclosure in the specification that the amount and size of external additives are critical to obtain the claimed aggregation and charging characteristics there is sufficient reason to believe that the reference inherently has the claimed aggregation degree, its change ratio, and the change

Art Unit: 1756

ratio in charge amount when conducting the contact-type development process using the single-component developer of Ugai.

It is not necessary for the reference to address the same concerns as the instant inventors in either a § 102 or § 103 rejection. In a § 102 rejection the Examiner takes the position that the same process is present in the prior art as claimed. The same process must have the same features. With respect to § 103, the art need not address the same problem as applicants in order to render obvious the instant claims. As long as the art reasonably suggests each element of the claimed process, the art can render obvious the claimed invention, even if for different reasons than applicants. Here, the art anticipates and/or renders obvious the claimed invention for the reasons of record.

Applicants have not specifically addressed Examples 81-97 discussed in this and the prior Office actions. This example uses contact development, which is claimed and indicated as critical to the claimed invention.

The burden of proof has been properly shifted to applicants to show that the processes disclosed in Ugai do not inherently have the claimed toner aggregation degree and aggregation degree change ration of claim 1 or electrostatic charge change ratio of claim 9. Applicants have not met that burden either by submission of evidence or persuasive argument.

The rejection is still seen as proper and is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1756

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

cdr
June 22, 2003


CHRISTOPHER RODEE
PRIMARY EXAMINER